

CLAIMS

1. An open topped refrigeration unit including an outer case having internal walls and a base panel defining an internal compartment, a refrigerated air generator, a duct, and a skirt, wherein the duct directs chilled air generated by the refrigerated air generator around the internal compartment and wherein the skirt is adapted to frame the open top of the internal compartment and to direct the chilled air flow into the internal compartment.
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2. A refrigeration unit as claimed in claim 1, wherein the refrigeration unit includes a support tray having walls including vents wherein the vents are adapted to direct chilled air flow.
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3. A refrigeration unit as claimed in claim 1 or 2, wherein the internal compartment is divided into smaller substantially separate compartments by the duct, base panel, internal walls, and support tray, and wherein chilled air flows in a predetermined direction through the separate compartments.
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4. A refrigeration unit as claimed in any preceding claim, wherein the base panel supports the duct and the duct supports the support tray.
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5. A refrigeration unit as claimed in any preceding claim, wherein the internal walls of the outer case have an internal profile adapted to cooperatively engage with the support tray to direct chilled air flow.
6. A refrigeration unit as claimed in any one of claims 3 to 5, wherein the skirt is provided as a profiled surface which further directs chilled air flow in the predetermined direction.
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7. A refrigeration unit as claimed in claim 6, wherein the profiled surface is planar.
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8. A refrigeration unit as claimed in claim 6, wherein the profiled surface is arcuate, whereby to direct generally upwardly moving air into the internal compartment.
9. A refrigeration unit as claimed in any preceding claim, wherein the refrigeration unit has a front, back and two side walls, the two side walls each having a recess extending from a position adjacent the back wall to adjacent the front wall, the recesses
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adapted to co-operate with the vents in the side walls of the support tray, the refrigerated air generator being positioned in the back wall and the duct being adapted to direct the chilled air from the refrigerated air generator against the two side walls such that the chilled air flows through the recesses and the vents in the side walls of the support tray.

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10. A refrigeration unit as claimed in claim 9, wherein the front wall has a recess extending from positions adjacent to the respective side walls, the recess adapted to co-operate with vents in the front wall of the support tray to direct chilled air to the compartment beneath the support tray.

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11. A refrigeration unit as claimed in any preceding claim, wherein the refrigerated air generator is a thermoelectric unit.

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12. A refrigeration unit as claimed in any one of claims 1 to 10, wherein the refrigerated air generator is a micro-compressor.

13. A refrigeration unit as claimed in any preceding claim, wherein the refrigerated air generator can recycle relatively warmer air with respect to the generated chilled air from the internal compartment to generate chilled air.

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14. A refrigeration unit as claimed in any preceding claim, wherein the support tray includes a removable wire rack and/or a stippled surface across the support tray.

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15. A refrigeration unit as claimed in any preceding claim, wherein the refrigerator unit includes a display panel or panels, and/or dividers on the support tray, for display of promotional material.

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16. A refrigeration unit as claimed in any preceding claim, wherein the refrigeration unit includes a drain tray to receive and collect drips generated from the operation of the refrigeration unit.

17. A method of refrigeration of an open topped refrigerator unit including:

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- providing a outer refrigeration case which defines an internal compartment;
- generating and providing chilled air to the internal compartment; and
- circulating chilled air within the internal compartment only, in a

predetermined direction such that the circulating chilled air within the compartment isolates the environment of the internal compartment from the external environment.

5 18. A method as claimed in claim 16, wherein the internal compartment has walls having an internal profile which facilitate directing and circulating chilled air.

10 19. A method as claimed in claim 17 or 18, wherein the internal compartment is divided into individual separate compartments wherein the division is adapted to direct the circulation of chilled air in a predetermined direction.

15 20. A method as claimed in claim 18 wherein the separate compartments are connected such that chilled air flows from one compartment to the next in a predetermined direction.

21. A method as claimed in any one of claims 17 to 20, wherein chilled air is directed in the predetermined direction by a duct that directs chilled air flow to the side walls of the internal compartment, recesses in the side walls that are adapted to co-operate with vents on a support tray to direct chilled air flow to a skirt which frames the open top of the internal compartment and directs air flow back into the internal compartment.